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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,366	03/12/2004	Stanislav M. Snaird	000417.00018	6070
22907	7590	09/11/2007		
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER LOPEZ, CARLOS N	
			ART UNIT 1731	PAPER NUMBER
			MAIL DATE 09/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,366	Applicant(s) SNAIDR ET AL.	
	Examiner /Carlos Lopez/	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/11/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 24-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-23, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 7/6/07 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,904,918; 6,810,884; 6,799,578 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, are rejected under 35 U.S.C. 102(b) as being anticipated by Snidr et al WO 98/16125. Claim 29 discloses a porous tubular element comprising cerium oxide. The tubular element encases a tobacco charge, which is deemed as the claimed tobacco rod.

Claims 1,4-7, 12-14,17-18, 20-21, and 45-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Bowen et al US 6,286,516 or alternatively under 35 U.S.C. 102(a) as being anticipated by Bowen et al WO 99/53778. '516 reference will be cited in the instant rejection. Bowen discloses a cigarette side-stream smoke treatment

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material. The treatment material may be wrapped over and be in substantial contact with a cigarette (Col. 5, lines 15ff). The treatment material is comprised of a first component comprising a porous non-combustible material, see Col. 4, lines 1ff, which as noted in col. 7 lines 5ff and in column 8, lines 45ff is a sorbitive material such as zeolites. The second component of the treatment material is incorporated in the first component, see Col 4, lines 1ff, for which it is an oxygen storage component such as cerium oxide, see Col. 7, lines 40ff. As noted in Col. 7, lines 33ff, the cerium oxide is in situ or applied to the surface of the zeolite. Hence, the claimed porous material having cerium oxide is anticipated by Bowen et al.

In addition to the first and second components, a catalyst is added to the treatment material selected, among other things from rare earth metals oxides, platinum oxides, and transition metal oxides, see Col. 8, lines 34ff, hence reading on claims 6-7, 17-18, 21

As for claims 14, the cerium oxide is in situ or applied to the surface of the zeolite, see Col. 7, lines 33ff.

As for claim 5, applying to the surface of the zeolite as noted in above, inherently creates a layer of the cerium oxide.

As for claim 45-46, Column 4, lines 7ff of Bowen notes that the oxygen storage component releases oxygen at temperature of 300°C, wherein the free burn rate temperature of the cigarette ranges from 400°C -900°C as noted in Col. 13, lines 50ff.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778) in view of Schlatter et al (US 5,040,551). As noted in page 13 of '778, catalyst material may be added to the oxygen storage material and treatment material (zeolite). '778 further notes that catalyst is used to promote various reactions and may be transition metal oxides. '778 is silent disclosing Iron oxide as a transition metal oxide. However, Schlatter, at Col. 4, lines 16ff, teaches of using Iron oxide to reduce carbon monoxide in cigarette smoke. Hence, at the time the invention was made it would have been obvious to a person of ordinary skill in the art to have used iron oxide as '778's catalyst as taught by Schlatter in order to reduce carbon monoxide in cigarette smoke.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778). Bowen is silent disclosing the loading rate of the cerium oxide. However, it does note that cerium oxide is used to ensure that the conventional free burn rate of tobacco is maintained, a showing of a result effective variable. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have conducted routine experimentation on the amount of cerium oxide in order to provide burn rates of conventional cigarettes. An optimum amount of cerium oxide would be obvious to be determined in order to assure that an overload of cerium oxide

does not decrease the number of puff a cigarette can provide due to an increase oxygen release.

Claims 10-11, 15-16, 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al WO 99/53778 ('778) in view of Grodek (US 5,004, 711). As noted above, Bowen teaches of using sorbitive material using a zeolite that may provide a dual purpose, sorbent material and catalyst material. '778 is silent disclosing other types of sorbent material. However, Grodek teaches that zirconium oxide is an adsorbent (Col. 11, lines 55) that can be used in cigarettes to filter smoke. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have used other known sorbent material such zirconium oxide as taught by Grodek, as the sorbent material for '778, in order to provide alternate sources of sorbent material.

As for claims 22-23, Bowen notes of using other catalyst such as transition metal oxides, which encompasses the claimed zirconium oxide, see page 14, lines 5ff, when mixed with the cerium oxide and zeolite the above noted treatment material meets the claimed invention as recited in claims 22- 23.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,12,20, and 45-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5 and 13 of U.S. Patent No. 6,286,516('516). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 5 and 13 of '516 discloses a cigarette comprised of a cerium oxide provided on a non-combustible porous particulate. Hence, it is obvious to a person of ordinary skill in the art that the cerium oxide provided on a porous adjunct meets the claimed limitation of a porous particulate cerium oxide.

As for claims 45-46, in view that claims 5 and 13 provides for the claimed porous particulate adjunct and the claimed cerium oxide, it would be obvious to a person of ordinary skill in the art to have expected the catalyst to release oxygen at free burn rate temperatures of the cigarette.

Response to Arguments

Applicant's arguments filed 7/6/07 have been fully considered but they are not persuasive. Applicant argues at page 17, first paragraph, and similarly at page 19 at the 3rd paragraph, that "Snaird '125 is directed to a porous apparatus in the form of a tubular

element, and neither suggests nor discloses a wrapper comprising porous particulate cerium oxide as is required by the claims. The cited document teaches only that the tubular element itself is porous, and does not disclose or suggest that the cerium oxide itself is porous, as required in claim 1."

Applicant's specification at bridging paragraph 15-16 notes that a "porous cerium oxide is formed as follows:

"The cerium may be formulated as a solution dispersion, such as cerium oxide sol, or the like and applied to the sorptive material such as zeolite. It is then dried and fired to provide cerium oxide particles fixed on the surfaces of the adsorptive material."

Hence, the "porous cerium oxide" as instantly argued is not a porous cerium oxide per se but instead it is merely, or at least one of its embodiments, a cerium oxide coated on a porous substrate. Thus Bowen's cerium oxide, which is coated on a porous substrate, is also deemed as a "porous particulate cerium oxide."

Additionally, there is no support for applicant's interpretation in the provisional application.

In regards to claims 12,20,45,46 rejected over Bowen, applicant is arguing functional limitations and/or benefits that are not recited in the instant invention and that do not structurally distinguish the claimed invention from that of Bowen. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at

issue were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."

In response to applicant's arguments against Bowen in view of Schlatter rejection or Bowen in view of Grodek rejection, the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument to Bowen in view of Schlatter rejection that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the instant case there was no knowledge gleaned from applicant's disclosure to formulate the applied 103 rejection.

Applicant traverses the ODP rejection of Bowen by arguing that Bowen's apparatus is non-combustible. It is found unpersuasive; a cigarette is a combustible

article. Bowen's paper contacted with the treating material comprising the claimed cerium oxide, which is deemed as the claimed paper wrapper, is deemed as combustible. It is unclear how Bowen's paper having cerium oxide be not combustible in contrast to applicant's claimed paper having cerium oxide be combustible.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Carlos Lopez/
Primary Examiner
Art Unit 1731

CL